# East Contra Costa County Habitat Conservation Plan Association

## HCPA Coordination Group Meeting

Thursday, August 19, 2004
1 p.m. to 3 p.m.

City of Pittsburg Council Chambers
65 Civic Drive in Pittsburg, 3rd Floor
(see map on reverse)

## Agenda

1:00 Introductions. Review contents of meeting packet.

1:05 Review and approve Draft Meeting Record of the July 15, 2004 Coordination Group meeting.

1:10 Updates:
- Gearing up for publishing Draft HCP/NCCP
- Important meeting of Executive Governing Committee on September 9
- Holding the September Coordination Group meeting a week early: September 9 instead of September 16
- Wetlands permitting
- Fees and funding: update from subcommittee assigned to work on this by the Coordination Group

1:30 "Jump start" / "stay ahead" / "rough step": Terms describing provisions that may or may not be in the HCP that ensure that conservation activities keep pace with development. What do they mean and where do we stand? What does the Coordination Group think?

2:00 Preview of likely changes to land acquisition strategy under the initial permit area scenario

2:15 Neighboring landowner protections: What's the latest? Views from the group?

2:30 Review and discuss revised draft of HCP/NCCP survey requirements for development projects (see attached table and text)

2:55 Confirm upcoming meeting dates. Upcoming Coordination Group meetings are scheduled as follows for the City of Pittsburg Council Chambers (usually 3rd Thursdays):

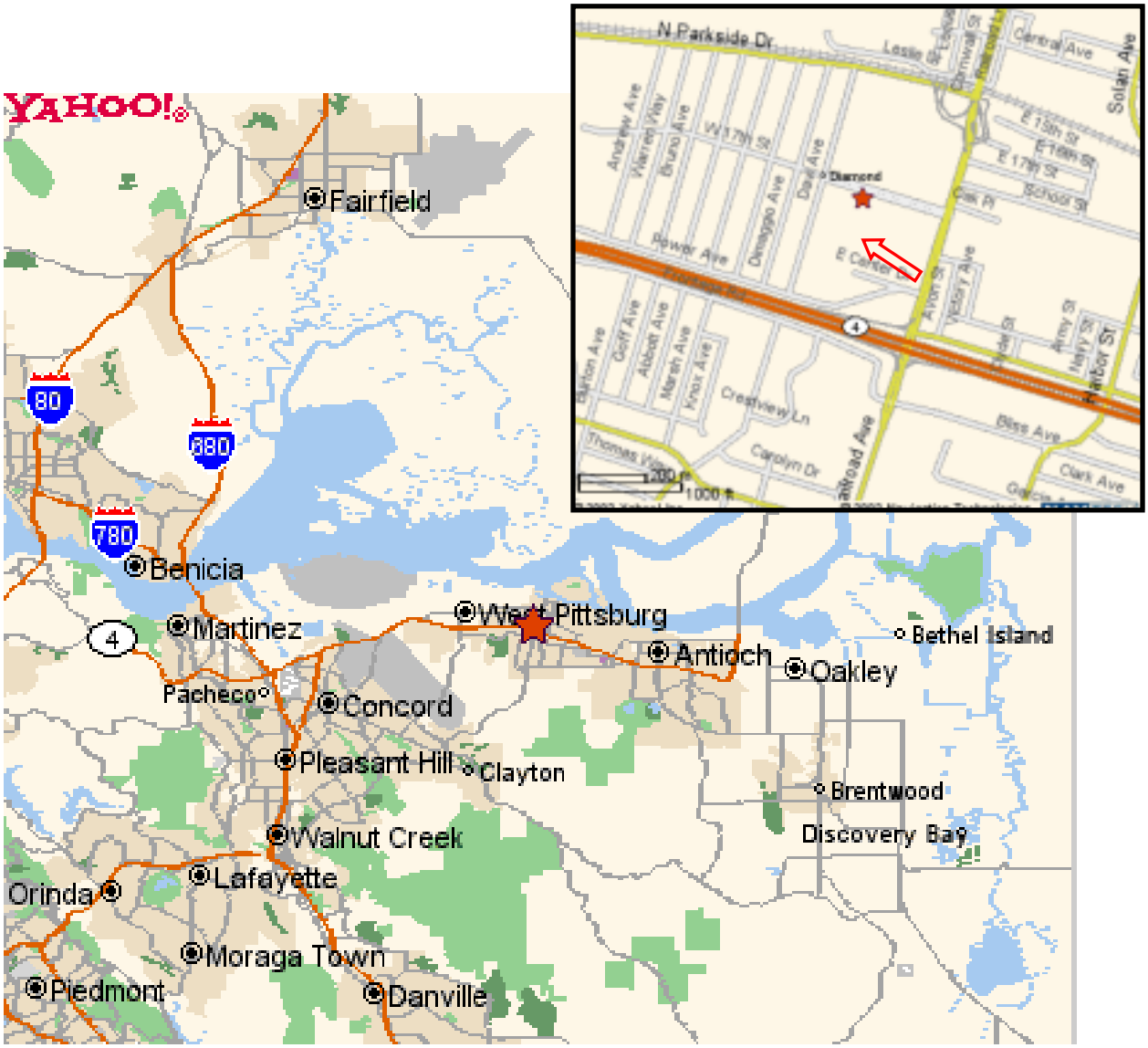
Thursday, September 9, 1 p.m. to 3 p.m. ← **(NOTE PROPOSED CHANGE OF SCHEDULE!!)**
Thursday, October 21, 1 p.m. to 3 p.m.
*HCPA Executive Governing Committee: Thursday, September 9, 2004, 5:30 pm*

2:55 Public comment.

3:00 Adjourn.

*Times are approximate. If you have questions about this agenda or desire additional meeting materials, you may contact John Kopchik of the Contra Costa County Community Development Department at 925-335-1227. The HCPA will provide reasonable accommodation for persons with disabilities planning to participate in this meeting who contact staff at least 72 hours before the meeting.*

# Map and Directions to Pittsburg City Hall
# 65 Civic Drive




**Directions from I-680, Central County**

1) Take Hwy 4 East toward Antioch/Stockton
2) Follow Hwy East over the hill (Willow Pass)
3) Exit Railroad Ave. (the 2nd exit after the hill)
4) At the end of the exit ramp, turn left on Railroad Ave.
5) Turn left at the second intersection, East Center Drive (signs for various city offices will also point you this way)
6) Immediately bear right into the large parking lot next to City Hall
7) Meeting is on the 3rd floor

**Directions from Antioch and points east**

1) Take Hwy 4 West toward Martinez/Richmond
2) Exit Railroad Ave.
3) At the end of the exit ramp, turn right on Railroad Ave.
4) Turn left at the next intersection, East Center Drive (signs for various city offices will also point you this way)
5) Immediately bear right into the large parking lot next to City Hall
6) Meeting is on the 3rd floor

# DRAFT MEETING RECORD

## East Contra Costa County Habitat Conservation Plan Association (HCPA) Coordination Group Meeting

Thursday, July 15, 2004
1 p.m. to 3 p.m.

City of Pittsburg Council Chambers

**1:00 Welcome and Introductions**. Meeting attendees introduced themselves. Coordination Group members and staff in attendance were:

Chris Barton, City of Pittsburg
Bradley Brownlow, Morrison & Foerster
Bob Glover, Home Builders Association of Northern California
Randy Jerome, City of Pittsburg
John Kopchik, CC County Community Dev.
Sheila Larsen, USFWS
Suzanne Marr, USEPA
David Zippin, Jones & Stokes

Also in attendance: Cheryl Morgan, Leslie Fellman (Colliers International), and Phillip Torres

**1:05 Review and approve Draft Meeting Record of the June 17, 2004 Coordination Group meeting.** The meeting record was accepted with the following change: item b under the 1:30 item: the last word "fees" was replaced with "plan participation".

**1:10 Updates:** John Kopchik and David Zippin provided an update:

- **Wetlands permitting –** A quick overview was provided.
- **Review key outcomes of the June 17 Executive Governing Committee (EGC) meeting** – John Kopchik provided a brief summary. Referring to the EGC's extended discussion of the financial aspects of the Plan, Sheila Larsen stated that developing a sound funding plan was extremely important, especially given the experience of other plans. Bradley Brownlow stressed that a voluntary fee was a different from the concept of a voluntary plan and that expressing support for making fees mandatory was not the same as expressing support for a mandatory plan.

**1:30 Review and discuss revised draft of HCP/NCCP survey requirements for development projects.** The Coordination Group discussed the revised survey requirements for project proponents seeking coverage under the HCP. Bradley Brownlow stated that provisions were a big improvement over the previous version, but described some ongoing concerns: 1) too much emphasis on avoidance; 2) relies on Implementing Entity to do research on reserves (Bradley, what am I missing); 3) sets up a fight in terms of when parity is reached; 4) avoidance measures for rare plants shouldn't also apply to rare landscape features because such features are harder to define; 5) concerned that the Implementing entity not become some kind of super regulator. Cheryl Morgan expressed concern that these provisions would create an incentive for landowners to destroy habitat. Others argued the opposite: that such incentives may exist already and that the HCP will diminish or eliminate such incentives. All agreed that references to the Implementing Entity having an approval role on issuing permits under the HCP/NCCP were an oversight and should be deleted.

**2:10 Continue discussion of fees and impacts, including (see attachment):**

a) **Tiered fees for urban development: direction received from EGC and additional considerations to consider referring to the Coordination Group subcommittee that has been set-up to explore this core issue further;**
b) **Approach to adjusting fees over time;**
c) **Approach to wetland impact fees;**
d) **Approach to road fees;**
e) **Updates to impact estimates and adjustments to permit area for urban development.**

**Consider providing Coordination Group Funding Subcommittee with additional guidance and/or referrals.** John Kopchik summarized the topic using the memo as a guide. Bradley Brownlow reiterated that anything but the fair share scenario is a non-starter from the business community point of view. The Coordination Group agreed to make the additional referrals to the Funding Subcommittee.

**2:55 Confirm upcoming meeting dates. Upcoming Coordination Group meetings are scheduled as follows for the City of Pittsburg Council Chambers (usually 3rd Thursdays):**

**Thursday, August 19, 1 p.m. to 3 p.m.**
**Thursday, September 16, 1 p.m. to 3 p.m.**
***HCPA Executive Governing Committee: Thursday, September 9, 2004, 5:30 pm***

**2:55 Public comment.** None.

**3:00 Adjourn.**

Chapter 9
# Assurances

## 9.1 Introduction

This chapter discusses the assurances requested by permittees that will accompany the ESA Section 10(a)(1)(B) permit issued by USFWS and the NCCP permit issued by CDFG. This chapter also discusses assurances that will be provided to private landowners bordering HCP/NCCP preserves and outlines the process for changing or amending the HCP/NCCP.

## 9.2 Assurances Requested by Permittees

### 9.2.1 Federal No Surprises

The federal *No Surprises Regulation* was established by the Secretary of the Interior on March 25, 1998. It provides assurances to Section 10 permit holders that no additional money, commitments, or restrictions of land or water will be required should unforeseen circumstances requiring additional mitigation arise once the permit is in place. The No Surprises Regulation states that if a permittee is properly implementing an HCP that has been approved by USFWS and/or NOAA Fisheries, no additional commitment of resources, beyond that already specified in the plan, will be required.

On June 10, 2004, the Court in *Spirit of the Sage Council v. Norton*, Civil Action No. 98-1873 (D.D.C.) ordered that, until the Service completes a rulemaking on revocation standards for incidental take permits, the Service may not approve new incidental take permit or related documents containing "No Surprises" assurances. Pursuant to the June 10, 2004, order in S*pirit of the Sage Council v. Norton*, Civil Action No. 98-1873 (D.D.C.), the Service is enjoined from approving new Section 10(a)(1)(B) permits or related documents containing "No Surprises" assurances until such time as the Service adopts new permit revocation rules specially application to Section 10(a)(1)(B) permits in compliance with the public notice and comment requirements of the Administrative Procedure Act. This notice concerns a step in the review and processing of a Section 10(a)(1)(B) permit and any subsequent permit issuance with be in accordance with the Court's order. Until such time as the Service's

authority to issue permits with "No Surprises" assurances has been reinstated, the Service will not approve any incidental take permit or related documents that contain "No Surprises" assurances.

When, in response to the Court's order in *Spirit of the Sage Council v. Norton*, Civil Action No. 98-1873 (D.D.C.), the "No Surprises" assurances rule is reinstated or revised, the reinstated or revised "No Surprises" assurances will apply to this HCP. Any permit issued pursuant to this HCP will be automatically amended in a manner consistent with the reinstated or revised "No Surprises" rule so as to afford the maximum protection to the Permittee consistent with the reinstated or revised "No Surprises" rule. The reinstated or revised "No Surprises" assurances will also apply to Changed and Unforeseen Circumstances under this HCP as described below. ~~The permittees request regulatory assurances (No Surprises) for all covered species in this Plan. In accordance with No Surprises, the permittees will be responsible for implementing remedial measures in response to any changed circumstances described in this Plan (see Chapter 6). The permittees will not be responsible for addressing unforeseen circumstances, as described below.~~

## Changed Circumstances

Changed circumstances are defined by the USFWS in the No Surprises Regulation as those circumstances affecting a species or geographic area covered by the HCP that can be reasonably anticipated by the applicant or USFWS and to which the parties can plan a response. The No Surprises Regulation requires that potential changed circumstances be identified in the Plan along with measures that would be taken by the permittee to respond to those changes. The changed circumstances that could arise in the Plan Area have been identified and are described in Chapter 6 (see Table 6-5).

In the event of changed circumstances, USFWS may determine that additional conservation or mitigation measures are necessary. Pursuant to the No Surprises Regulation, if such measures were addressed in the HCP, their implementation ~~are~~ is required. If such measures were absent from the HCP, USFWS will not require any additional conservation or mitigation without the consent of the permittee, as long as the HCP is found to be properly implemented. *Properly implemented* means that the commitments and the provisions of the HCP and the EIS have been or are being fully implemented.

## Unforeseen Circumstances

Unforeseen circumstances are defined by federal regulation as (17 CFR §17.3):

> changes in circumstances affecting a species or geographic area covered by a conservation plan that could not reasonably have been anticipated by plan developers and the USFWS at the time of the conservation plan's negotiation

> and development, and that result in a substantial and adverse change in the status of the covered species.

The NCCP Act defines unforeseen circumstances as (California Fish and Game Code Section 2805(j):

> …changes affecting one or more species, habitat, natural community, or the geographic area covered by a conservation plan that could not reasonably have been anticipated at the time of plan development, and that result in a substantial adverse change in the status of one or more covered species.

In the event of unforeseen circumstances during the permit term, amendments to the HCP/NCCP may be proposed by either the Governing Board or USFWS and/or CDFG to address these circumstances. USFWS, CDFG, and the Governing Board would work together to identify opportunities to redirect resources to address unforeseen circumstances. However, it is intended that USFWS and CDFG will not:

- require the commitment of additional land, water, or financial compensation by the Permittees other than those agreed to elsewhere in the HCP; or
- impose additional restrictions on the use of land, water, or natural resources otherwise available for use by the Permittees under the original terms of the HCP/NCCP to mitigate the effects of the covered activities.

As described in the No Surprises Regulation, it is USFWS's responsibility to demonstrate the existence of unforeseen circumstances using the best scientific and commercial data available.

## Non-Listed Species

Each species covered by the HCP/NCCP has been treated as though it is listed under ESA and CESA and will be included on the Section 10(a)(1)(B) permit. The permits will be effective for listed species immediately upon issuance. Should a non-listed covered species become listed during the permit term, that species will be added to the permit and take coverage will become effective for that species at the time of listing. No changes to the terms and conditions of the Implementing Agreement or modifications to conservation measures are required. Under Section 2835 of the California Fish and Game Code, CDFG may issue take authorization for covered species, regardless of their listing status.

Should a species not covered by the Plan be listed, proposed, or petitioned for listing, the permittee may request that USFWS and CDFG add the species to the Section 10(a)(1)(B) permit and the HNCCP permit, respectively. In determining whether or not to seek incidental take coverage for the species, the permittee will consider, among other things, whether the species is present in the Plan Area and if otherwise lawful activities could result in incidental take of the species. If incidental take coverage is desired, the Plan and pPermits could be modified or amended. Alternatively, the permittee could apply for a new and separate

permits. Procedures for modifications and amendments to the Plan are outlined in *Modifications and Amendments to the Plan,* below.

### NCCP Assurances

The NCCP Act [Ssection 2820(f)] includes similar provisions to the federal No Surprises Regulation ensuring that "if there are unforeseen circumstances, additional land, water or financial compensation or restrictions on the use of land, water, or other natural resources shall not be required without the consent of the plan participants..." The Act specifies that assurances for plan participants are may be provided. These assurances are commensurate with the long-term conservation assurances and associated implementation measures provided in the Plan. CDFG's determination of the level of assurances and the time limits specified in the implementing agreement will be and are based on the overall knowledge of the species and natural communities, the strength of the conservation strategy, and the size and duration of the Plan [sections Sections 2820(f)(A)-(H)].

## 9.2.2 Conservation Contributions by State and Federal Agencies

As described in Chapter 8, implementation of the mitigation portion of the Plan will be the responsibility of the Permittees. It is anticipated that this HCP/NCCP will be partially funded by state and federal agencies, including USFWS and CDFG, will contribute to the conservation portion. The permittees recognize that state and federal funds cannot be guaranteed in advance of the approval of yearly budgets, nor can they be guaranteed by agency staff who do not have the authority to commit these funds. However, the permittees seek assurance that USFWS and CDFG will make every effort to assist the Implementing Entity in securing the funding outlined in Chapter 8 to contribute to species recovery and to help implement the conservation portion of the HCP/NCCP.

## 9.2.3 Staffing Contributions by State and Federal Agencies

Successful implementation of the HCP/NCCP relies on the continued participation and feedback of representatives of CDFG and USFWS. As described in Chapter 7, CDFG and USFWS staff are expected to participate in HCP/NCCP Governing Board meetings and subcommittees as needed to evaluate and provide advice on Plan implementation. In particular, CDFG and USFWS staff participation is critical to the success of the adaptive management and monitoring program. To ensure this participation, the Permittees request assurances that CDFG and USFWS will provide staff to serve on all appropriate committees and will ensure, to the extent possible, staff participation in discussions and meetings with the others to ensure that the implementation of

Plan is consistent with any findings upon which the Section 10(a)(1)(B) Permit is based.

## 9.2.4 Section 7 Consultations

An important goal of the Plan is to provide a framework for ESA compliance for the covered species for all covered activities in the inventory area, whether or not covered activity occurs under Section 7 or 10 of the federal ESA. The USFWS will evaluate the direct, indirect, and cumulative effects of the covered activities in its internal biological opinion issued in connection with the Plan and issuance of the Section 10(a)(1)(B) Permit.

Projects that fall under Section 7 of the ESA are evaluated under different standards than projects subject to Section 10 of the Act. Whereas non-federal projects are required to obtain a permit for take of listed species, federal agencies must consult with USFWS or NOAA-Fisheries whenever their actions have the potential to affect a listed species. "Affect" may or may not be the same as "take", depending on the species and the project. In most cases, however, the Section 7 and 10 standards will be the same or very similar, so the conservation measures in this Plan should apply equally to federal and non-federal projects.

To the maximum extent allowable, in any consultation under Section 7 of the federal ESA after the ESA Permit is issued, the USFWS will ensure that the biological opinion issued in connection with a covered activity in the inventory area that affects covered species is consistent with the internal biological opinion for the HCP/NCCP. Such projects must be consistent with the terms and conditions of the HCP/NCCP and the IA. Any reasonable and prudent measures included under the terms and conditions of a biological opinion issued subsequent to Permit issuance with regard to covered species and covered activities, to the maximum extent appropriate, will be consistent with the implementation measures of the HCP/NCCP and the IA. The USFWS will process subsequent ESA consultations for covered activities in accordance with the established regulatory process and deadlines (50 CFR Section 402.14).

Many of the Section 7 consultations will occur as a result of impacts to jurisdictional waters of the United States and the need to obtain a permit from the USACE. If a regional general permit is obtained from the USACE for the inventory area, as planned, the linkage between the Section 7 consultation and the HCP/NCCP will be tighter. USFWS anticipates developing a programmatic biological opinion for the regional general permit that will provide streamlined ESA compliance for USACE for activities covered by the HCP/NCCP.

# 9.2.5 Assurances to Private Landowners

## Neighboring Landowner Assurances

This Plan calls for the acquisition of land and coordinated management of a Preserve System for the benefit of covered species. As a result of the conservation strategy described in the Plan, some populations of listed species are expected to increase in the preserves and elsewhere. Landowners adjacent to preserves may be concerned that populations of state- or federally listed species in the preserves may expand and colonize or use their lands, potentially restricting their land-use activities.

Active private ranches, cropland, pasture, orchards, or vineyards are the lands that would most likely be adjacent to HCP/NCCP Preserves. Moreover, these land uses would be the most likely to be affected by the presence of new covered species or increasing populations of covered species. For these reasons, Neighboring Landowner Assurances will apply only to agricultural lands, as defined below. Other land uses such as urban development are excluded from Neighboring Landowner Protections because on-going take of covered species is not expected to occur within these areas. If take occurs, events are expected to be limited and geographically restricted to the immediate boundary with HCP/NCCP Preserves. Landowners in urban development typically do not request take coverage for on-going activities, nor do they need it.

By providing Neighboring Landowner Assurances, this Plan acknowledges that successful implementation of the conservation strategy may cause spillover of listed species onto adjacent agricultural lands. Take coverage afforded by Neighboring Landowner Assurances could result in a diminution of the benefits of the conservation strategy in instances where species expand or increase their populations within the plan area. Neighboring Landowner Assurances do not provide for take of existing populations and occupied habitat of covered species and therefore would not result in impacts relative to baseline. Neighboring Landowner Assurances provide incidental take permit coverage on an "opt-in" basis for all agricultural lands within 0.5 mile of the boundary of any land or property acquired ~~as habitat mitigation~~ by the HCP/NCCP or by another organization in partnership with the HCP/NCCP Implementing Entity (i.e., the land becomes part of the HCP/NCCP Preserve System). This opt-in approach allows for landowners to willingly participate in the Plan. The approach is required by USFWS to allow an affirmative statement be made by willing landowners to participate in the Plan. Those landowners that do not seek to participate would not be required to do so but would also not receive coverage for incidental take for their ongoing activities.

The neighboring landowner protections listed below will be offered under the Plan.

- Agricultural lands within 0.5 mile of preserve boundaries ~~will~~ may be covered for incidental take of all ~~state- or federally listed~~ covered species

under the Plan's associated Section 10(a)(1)(B) and NCCP take permits, should any such lands support increased use or become inhabited by covered species *after* establishment of the Preserve System.

- Coverage under the incidental take permits will be offered to neighboring lands actively being used for agricultural purposes at the time that the adjacent HCP/NCCP preserve is established. For purposes of this Plan, *agricultural* means crop production, animal production and husbandry, forage production, and grazing activities~~;~~. ~~a~~*Actively being used for* means lands on which usual and customary agricultural practices are occurring or planned to occur, including normal crop rotation practices, at the time the neighboring HCP/NCCP preserve is established. For example, if agricultural lands that are used for crop production lie fallow in accordance with normal crop-rotation practices at the time the neighboring preserve is established, those lands would be considered to be actively used for agricultural purposes. Such coverage shall continue, subject to the terms and conditions of the Plan, the Implementing Agreement, and the incidental take permits, for as long as the neighboring lands are actively being used for agricultural purposes and the permits remain in effect. Normal agriculture practices will be covered by Neighboring Landowner Assurances, ~~might~~ including but not limited to~~e~~ crop planting, soil tilling, crop harvesting, livestock grazing, fence construction and maintenance, vehicle or horse use, construction and maintenance of typical farm and other outbuildings ~~and the habitat on which grazing takes place within one-half mile of the preserve boundary~~.
- C~~Dairy farms and associated habitat, however, would not be covered. Additionally, c~~overage will not be offered to neighboring lands devoted to non-agricultural purposes at the time the adjacent HCP/NCCP Preserve is established. Take coverage does not include conversion of agriculture to other uses.
- A change in land cover as defined by the land cover types in this Plan (e.g., cropland to vineyard) would require landowners reapplying to the Implementing Entity for Neighboring Landowner Assurances in order to determine the new baseline condition of covered species on the affected property.
- Neighboring landowner coverage under the incidental take permits will be extended only to individuals or populations of covered species that colonize the neighboring lands *after* establishment of the adjacent HCP/NCCP preserve. Take coverage will not be provided for individuals or populations of covered species that inhabit the neighboring lands prior to the establishment of the preserve, as identified in a baseline survey (see below).
- Upon establishment of the preserve, the Implementing Entity will send a letter to each neighboring landowner whose lands are within 0.5 mile of the preserve boundary and are actively used for agricultural purposes. The letter will explain the ECCC HCP/NCCP and the landowner's eligibility for coverage under the Plan's incidental take permits. Landowners who are interested in receiving this coverage could respond to the Implementing Entity. Prior to receiving coverage under the Plan, the environmental baseline must be determined. Landowners will have the option of either

allowing biologists with the Implementing Entity to survey their property at no cost or hiring and paying for their own consultants to do so. Reports prepared by landowner consultants will be reviewed by the Implementing Entity for adequacy.

- The survey report will address the zone of neighboring landowner protections and will include, at a minimum, a description of habitat for covered species (extent and quality), records of covered species in the general area, and observations of covered species within that area. Upon receipt of ~~an approved~~a biological report approved by the Implementing Entity and a *Certificate of Inclusion* signed by the landowner, the Implementing Entity will grant take coverage to the landowner under this program.
- The Implementing Entity will maintain a record of all correspondence and certificates of inclusion sent to neighboring landowners subject to these protections, as well as signed certificates of inclusion returned by landowners. The Implementing Entity will notify USFWS and CDFG annually of the number, location, and size of neighboring lands entered into the program. Copies of the certificates will be provided to USFWS and CDFG upon request. The location of all neighboring lands enrolled in the program will be mapped in the Implementing Entity's GIS database.

### Public Access to Conservation Easements Held by Private Landowners

It is not the intent of the Implementing Entity to allow general public access on conservation easements that are part of the HCP/NCCP Preserve System. Public access on private lands managed under the HCP/NCCP could conflict with ongoing agricultural operations and could pose a safety risk to the public. Public access to lands under conservation easements could also pose a risk of unwanted trespass onto adjacent, privately held lands. Generally, the Implementing Entity will discourage public access on conservation easements except in cases where a regional trail connection may be needed. Public access on conservation easements will only be permitted with the landowner's consent. All conservation easements will provide for access for the Implementing Entit~~ies~~y's biologists to conduct management and biological monitoring necessary for compliance with the Plan's adaptive management and biological monitoring program.

## 9.3 Modifications ~~and Amendments~~ to the Plan

The HCP/NCCP or incidental take permit can be ~~amended or~~ modified in accordance with USFWS and CDFG regulations and the terms of the Implementing Agreement. HCP/NCCP modifications are not anticipated on a regular basis. ~~Amendments~~ Modifications can be requested by a permittee or by the permitting agencies. The categories of modification that are recognized, in

order of significance, are administrative changes, minor modifications, and major amendments. ~~Amendments or modifications to the Plan may be minor or major.~~

## 9.3.1 Administrative Changes

Administrative changes are internal changes or corrections to the Plan that do not require preauthorization from USFWS or CDFG. Administrative changes will be made in writing and documented by the Implementing Entity. USFWS and CDFG will be provided a summary of administrative changes in an annual report. Examples of administrative changes include:

- corrections of errors in the Plan that do not change the intended meaning or obligations;
- minor changes to survey or monitoring protocols that are not proposed in response to adaptive management;
- day-to-day implementation decisions, such as modifying irrigation schedules for created/restored habitats based on observed water needs of planted vegetation;
- modifying the design of existing research or implementing new research;
- conducting additional monitoring surveys;
- modifying HCP/NCCP monitoring protocols to align with USFWS and CDFG monitoring protocols as they may be modified in the future;
- adopting new monitoring protocols that may be promulgated by USFWS and CDFG in the future;
- annual adjustments to the HCP/NCCP Mitigation Fee to keep pace with the inflation of land values; and
- changes to the membership of the Governing Board, the Science Advisors, or any advisory committees to the Board without changing the representation of the permittees, agencies, or organizations.

~~See Chapter 6 for which monitoring and adaptive management actions warrant administrative changes or minor modifications.~~

## 9.3.2 Minor Modification

Minor modifications are changes that do not affect the impact assessment or conservation strategy described in the Plan and do not affect the ability of the Implementing Entity to achieve the biological goals and objectives of the HCP/NCCP. Minor modifications do not require an amendment to the permits or the Implementing Agreement, but they do require pre-approval by USFWS and CDFG before being implemented. Examples of minor modifications include:

- updates to the land-cover map or to species-occurrence data that are consistent with the predications and expectations of the Plan;
- minor changes to the biological goals or objectives in response to adaptive management;
- modification of monitoring protocols for Plan effectiveness not in response to changes in standardized monitoring protocols from USFWS or CDFG;
- modification of existing or adoption of additional conservation measures that improve the likelihood of achieving HCP/NCCP species objectives;
- discontinuing implementation of conservation measures if they are ineffective;
- modification of existing or adoption of new performance indicators or standards if results of monitoring and research, or new information developed by others, indicate that the initial performance indicators or standards are inappropriate measures of success of the applicable conservation measures;
- modification of existing or adoption of additional covered species or natural community objectives where such changes are consistent with achieving covered species, natural community, and overall HCP/NCCP goals; and
- minor changes to the reporting protocol.

Changes in the land acquisition configuration of the Plan (see Conservation Measure 1.3.1) may be necessary to address changing land-use patterns in the inventory area or a lack of willing sellers in key Acquisition Analysis Subzones. Changes in land-acquisition requirements within a Zone or Subzone (whichever applies in Conservation Measure 1.3.1) that amount to less than 5% of the original acreage ~~(within each subzone, not overall)~~ are considered minor modifications as long as:

1. the overall target-acquisition acreage of land-cover type or habitat for covered species does not change within the inventory area (i.e., decrease in land acquisition on one Subzone is balanced by an increase in land acquisition in another Subzone);
2. the changes between Zone or Subzone are biologically equivalent to the original Plan; and
3. the changes do not significantly affect the ability of the Implementing Entity to mitigate the impacts on covered species, contribute to the recovery of covered species, and meet the Plan's biological goals and objectives.

A minor change in land-acquisition configuration may be needed, for example, to account for small differences in acreages of land-cover type across Subzones due to parcel-boundary changes or overlap between Subzones. Any change in land acquisition requirements that exceeds 5% of the original acreage ~~within any subzonerequirement~~ or that is inconsistent with the criteria above is considered a major amendment.

A change in the HCP/NCCP Permit Area (either a decrease or an increase) in response to an approved change in the ULL is also considered a minor modification, as long as the change in the ULL:

- is compatible with the conservation configuration of the Plan,
- is consistent with the impact analysis of the Plan, and
- addresses activities that are already covered by the Plan.

All minor modifications must first be approved by the HCP/NCCP Governing Board in a public meeting, and are subject to final approval by USFWS and CDFG. To modify the Plan without amending the permits, the HCP/NCCP Governing Board will submit to USFWS and CDFG a written description of the proposed change and an explanation of why its effects are not believed to be significantly different from those described in the original Plan. If USFWS and CDFG concur with the proposal, they will authorize the HCP/NCCP modification in writing, and the modification shall be considered effective upon the date of USFWS and CDFG's written authorization.

## 9.3.3 ~~Plan~~ Major Amendments

A ~~plan~~ major amendment is a change in the Plan that may affect the impact analysis or conservation strategy in the Plan. ~~Amendments~~ Major amendments require amending the HCP/NCCP and the incidental take permit through the same formal review process as the original Plan and permit, including NEPA/CEQA review, a Federal Register notice, an internal Section7 consultation at USFWS, and formal findings by CDFG. The HCP/NCCP Governing Board will submit a major amendment to USFWS and CDFG in a report that includes a description of the need for the amendment, an assessment of its impacts, and any alternatives by which the objectives of the proposal might be achieved.

Examples of changes that would require a ~~plan~~ major amendment include but are not limited to:

- revisions of the permit-area boundary that do not qualify for a minor modification;
- addition of species to the covered-species list;
- ~~listing under the ESA of a new species, not currently addressed in the HCP, that may be taken by project activities;~~increasing the allowable take limit of existing covered activities or adding new covered activities to the Plan;
- modifications of any important action or component of the conservation strategy under the HCP/NCCP, including funding, that may substantially affect levels of authorized take, effects of the covered activities, or the nature or scope of the conservation program;

- a major change in performance standard if monitoring or research indicate that performance standards are not attainable because technologies to attain them are either unavailable or infeasible; and
- extending the permit term beyond 30 years.

## Amending the Section 10(a)(1)(B) Permit

To amend the Section 10(a)(1)(B) permit, the HCP/NCCP Governing Board will submit a formal application to USFWS. This application must include a revised HCP/NCCP, a permit application form, any required fees, a revised Implementating Agreement, and the required compliance document under NEPA. The appropriate NEPA compliance process and document will depend on the nature of the amendment being proposed. Upon submission of a completed application package, USFWS will publish a notice of the proposed application in the Federal Register, initiating the NEPA and HCP review process. After public comment, USFWS may approve or deny the permit amendment application.

## Amending the NCCP Permit

Procedures for amending the NCCP permit shall be included in the Implementing Agreement and processed in accordance with applicable NCCPA requirements. The NCCP permit amendment will be subject to the requirements of CEQA.

**Table 6-X.** Project Proponents can use this table to identify survey requirements for their parcel. The planning-survey requirements described below are necessary if parcel contains both the land-cover type and habitat features described in the first two columns. Subsequent surveys are required if project is not able to avoid impacts to the potential habitat identified by the planning surveys. Please refer to the species-specific measures (listed under each individual species) for a complete description of survey, avoidance and monitoring requirements.



| Land cover type | Specific Habitat Elements | Species | Requirements | | | |
|---|---|---|---|---|---|---|
| | | | Planning Survey[1] | Preconstruction Survey | Best Management Practices | Construction Monitoring |
| Grasslands, Oak Savanna, Agriculture | None | San Joaquin kit fox | ▪ Identify and map potential habitat | ▪ Establish presence/absence<br>▪ Determine status and map all dens (>5 in. diameter) | ▪ Monitor dens<br>▪ Destroy unoccupied dens<br>▪ Discourage use of occupied (non-natal) dens | ▪ Establish exclusion zones (>50 ft) for potential and atypical dens<br>▪ Establish exclusion zones (>100 ft) for known dens<br>▪ Notify USFWS of any occupied natal dens |
| | | Western Burrowing Owl | ▪ Identify and map potential habitat | ▪ Establish presence/absence (pellets, whitewash, prey remains)<br>▪ Determine status and map all burrows<br>▪ Document use of habitat (e.g., breeding, foraging) | ▪ Avoid occupied nests during breeding season (Feb–Sep)<br>▪ Avoid occupied burrows during nonbreeding season (Sep–Feb)<br>▪ Install one-way doors in occupied burrow (if avoidance not possible)<br>▪ Monitor burrows with doors installed | ▪ Establish buffer zones (250 ft) around nests<br>▪ Establish buffer zones (160 ft) around burrows |

| Land cover type | Specific Habitat Elements | Species | Requirements | | | |
|---|---|---|---|---|---|---|
| | | | Planning Survey[1] | Preconstruction Survey | Best Management Practices | Construction Monitoring |
| Aquatic (ponds, wetlands, streams and marshes) | ▪ Aquatic habitat accessible from San Joaquin River (including sloughs, irrigation and drainage canals, ponds, low-gradient streams) | Giant garter snake | ▪ Identify and map potential habitat | ▪ Delineate aquatic habitat up to 200 ft from water's edge on each side<br>▪ Document any occurrences | ▪ Limit construction to Oct–May<br>▪ Dewater habitat April 15–Sep 30 prior to construction<br>▪ Minimize clearing for construction | ▪ Delineate 200-ft buffer around potential habitat near construction<br>▪ Provide field report on monitoring efforts<br>▪ Stop construction activities if snake is encountered; allow snake to passively relocate<br>▪ Remove temporary fill or debris from construction site<br>▪ Construction personnel must participate in training |
| | ▪ Ponds and wetlands in grassland, oak savanna, oak woodland<br>▪ Vernal pools<br>▪ Reservoirs<br>▪ Small lakes<br>▪ Slow-moving streams, ponds, or marshes | California tiger salamander | ▪ Identify and map potential habitat | ▪ Document habitat quality and features<br>▪ Provide Services with photo-documentation and report | ▪ Provide written notification to FWS and DFG regarding timing of construction and likelihood of occurrence on site | |
| | | California red-legged frog | ▪ Identify and map potential habitat | ▪ Document habitat quality and features<br>▪ Provide Services with photo-documentation and report | ▪ Provide written notification to FWS and DFG regarding timing of construction and likelihood of occurrence on site | |

| Land cover type | Specific Habitat Elements | Species | Requirements | | | |
|---|---|---|---|---|---|---|
| | | | Planning Survey[1] | Preconstruction Survey | Best Management Practices | Construction Monitoring |
| Seasonal Wetlands | ▪ Vernal pools,<br>▪ Sandstone rock outcrops, or<br>▪ Sandstone depressions | Covered shrimp | ▪ Identify and map potential habitat | ▪ Establish presence/absence<br>▪ Document and evaluate use of all habitat features (e.g. vernal pools, rock outcrops) | ▪ Establish a buffer near construction activities<br>▪ Prohibit incompatible activities<br>▪ Any filling of vernal pools (requires separate permit) must take place after pools are dry and sampling completed<br>▪ Collect and provide soils for storage by IE | ▪ Establish 250-ft buffer around outer edge of all hydric vegetation associated with habitat<br>▪ Construction personnel must participate in training |
| | | Western Burrowing Owl | ▪ (see above) | ▪ (see above) | ▪ (see above) | ▪ (see above) |
| Any | ▪ Rock formations with caves,<br>▪ Mines,<br>▪ Buildings | Townsend's big-eared bat | ▪ Map and document potential habitat | ▪ Establish presence/absence<br>▪ Determine if potential sites were recently occupied (guano) | ▪ Seal hibernacula before November<br>▪ Seal nursery sites before April<br>▪ Delay construction near occupied sites until the hibernation or nursery seasons are over | |
| | ▪ Potential nest sites (usually below 200 ft. in elevation) | Swainson's Hawk | ▪ Inspect large trees for presence/absence of nest sites | ▪ Determine whether potential nests are occupied | ▪ Delay construction within ½ mile of occupied nests (March 15–Sep 15)<br>▪ If necessary, remove active nest tree after nesting season only | ▪ Establish ½ mile buffer around active nest |
| | ▪ Potential nest sites (secluded cliffs with overhanging ledges; large trees) | Golden Eagle | ▪ Document and map potential nests | ▪ Establish presence/absence of nesting eagles | ▪ Delay construction (within ½ mile) near active nests during the nesting season | ▪ Establish ½ mile buffer around active nest |

[1] Changes to project design that result from Planning Survey information will help avoid impacts to covered species

Unchanged from version discussed on 7-15-04

# Surveys for Covered Activities

The Implementing Entity will monitor the acquisition of and impacts to land-cover type, potential occupied habitat; rare vegetation and landscape features; and the implementation of minimization and avoidance measures through surveys. Three types of surveys may be required prior to or during construction of covered activities: planning surveys, preconstruction surveys, and construction monitoring. In this context, covered activities usually refer to development and other ground-breaking activities within the urban limit line. However, surveys are required for all covered activities, including restoration taking place inside the Preserve System.

**Planning Surveys.** Planning surveys are required prior to submission of an application for a permit. Planning surveys aim to minimize impacts and streamline the existing endangered-species regulations and were developed with the following guiding principles:

- avoid and minimize impacts to covered species and natural land-cover types to the maximum extent practicable;
- simplify and reduce pre-project survey requirements relative to current and future environmental regulations without the HCP/NCCP; and
- make survey requirements proportional to impacts—the survey burden should be lower on low-quality habitat versus high-quality habitat.

Project proponents will conduct planning surveys to identify the following biological resources:

- land-cover type (as described in Chapter 3);
- suitable *breeding* habitat for Swainson's hawk, California tiger salamander, California red-legged frog, and no-take wildlife species (golden eagle, peregrine falcon, white-tailed kite, ringtail);
- suitable habitat for Townsend's big-eared bat, San Joaquin kit fox, Western burrowing owl, and covered shrimp species;
- rare vegetation and landscape features (as defined in Conservation Measure 1.2.4);
- covered and no-take plants; and
- jurisdictional waters including wetlands (delineation, if necessary, see description below).

The results of the planning survey will provide project applicants with the information necessary to avoid and minimize take to the maximum

extent practicable. Avoidance and minimization measures must be incorporated into the project design and submitted with the application package

The survey report will be included in the application package with the following information for the site:

- descriptions of the types, condition, and extent of all vegetation communities, rare vegetation types, rare landscape features, covered and no-take plants, jurisdictional waters, and suitable habitat for the covered wildlife species (listed above);
- CNDDB California Native Species Field Survey Forms for all special-status plants encountered on the site (including species not covered under this HCP/NCCP);
- a map of these resources;
- a description of the biological value of the habitat and landscape features identified, if known;
- an assessment of the impact of the covered activity or project on these resources; and
- a description (and map, if appropriate) of avoidance and minimization measures.

**Preconstruction Surveys**. If projects contain suitable habitat for one or more of the covered species identified in the above list, and take cannot be avoided through modifications to project design, then preconstruction surveys are necessary to establish presence of covered species and to implement additional avoidance and minimization measures (see Table 6.X for survey requirements). In general, preconstruction surveys are limited to those species for which we have the greatest opportunity to contribute to recovery by minimizing take of individuals (examples include the San Joaquin kit fox and the Western burrowing owl). In some cases, preconstruction surveys are required to address the uncertainty under which certain habitat models functioned (such as the giant garter snake and covered shrimp species).

Other biological field surveys beyond those required by this HCP/NCCP (e.g., for special-status species addressed by CEQA but not covered by the Plan) may be required by local agencies.

**Construction Monitoring.** Construction monitoring involves the monitoring by biologists of biological resources identified during the planning and preconstruction surveys. Construction monitoring requires the presence of biological monitors during implementation of covered activities where resources that are protected under the HCP/NCCP have been identified in or near construction sites. Construction monitoring ensures that the impact avoidance and minimization measures integrated into the project design and submitted with the application package are properly implemented.

## Planning Surveys

### Wildlife

Planning surveys will be conducted at proposed project sites to inform project design and to avoid and minimize impacts on biological resources as required under the HCP/NCCP.

A qualified biologists will conduct planning surveys on behalf of project proponents at sites being considered for covered activities. Surveys for covered activities are paid for by the project proponent. Planning surveys will assess the location, quantity, and quality of suitable habitat for specified covered wildlife species on the project site. A determination of presence/absence is not required because covered species are assumed to occupy suitable habitat in impact areas, and mitigation is based on an assumption of take. Suitable habitat will be identified for no-take species. To determine if additional surveys are warranted, suitable habitat for the following covered species will be conducted: Townsend's big-eared bat, San Joaquin kit fox, Western burrowing owl, Swainson's hawk, California tiger salamander, California red-legged frog, and covered shrimp species.

Results of planning surveys will inform project design and be used to determine, if avoidance is not possible, which preconstruction and construction surveys are necessary. For example, if suitable habitat is not present for one of the covered species identified above, the project proponent will not be required to conduct preconstruction surveys or construction monitoring for that species. The Implementing Entity will review all planning survey reports before approval under the HCP/NCCP.

**Rationale.** Information used to develop species habitat models are not sufficiently detailed to determine if habitat for some covered species (e.g., vernal pools) is present or, if present, to determine the quality of that habitat on lands considered for development.

Because of these limitations, site-specific information from the planning surveys will guide design of developments to avoid and minimize impacts on covered species and to help ensure that the lands selected for acquisition will contribute towards achieving the biological goals and objectives of the HCP/NCCP.

### Plants

Planning surveys for plants will be conducted at proposed project sites to inform project designs and to avoid and minimize impacts on plants as required under the HCP/NCCP.

Surveys will be conducted using approved CDFG/USFWS methods during the appropriate season for identification of the species. Plant surveys will identify covered plants and no-take plant species. If covered species are found, the location, extent, and condition of all

occurrences will be documented in a survey report submitted to the Implementing Entity. Survey reports will include CNDDB California Native Species Field Survey Forms for all special-status plants encountered on the site (including species not covered under this HCP/NCCP). Copies of these forms will also be submitted to the CNDDB. Results of planning surveys will inform project design and be used, if avoidance is not possible, to guide the preserve-acquisition process. The Implementing Entity must ensure that preserves support populations of the covered species that are as healthy as or healthier than those populations that will be adversely affected by covered activities.

**Rationale**

- The location of all covered plants within the inventory area is not known due to survey and mapping limitations.
- General habitat distribution models were developed for seven of the 10 covered plant species. The habitat requirements of the remaining three species are not well known enough to develop a credible model at this time.
- Because of these limitations, project proponents must determine if impacts on covered plants could result from covered activities such that the Implementing Entity can mitigate for losses as required by the HCP/NCCP.
- The great majority of known populations of covered plants are outside the inventory area, so many populations are expected to be included incidentally as the Preserve System is established to meet vegetation community and wildlife goals and objectives. However, to ensure that covered plants are conserved, site-specific surveys will be conducted in impact areas.

### Land-Cover, Rare Vegetation, & Rare Landscape Features

Planning surveys for land cover, rare vegetation type and rare landscape features will be conducted at proposed project sites to inform project design and to avoid and minimize impacts on biological resources as required under the HCP/NCCP.

Surveys will be conducted using approved methods during the appropriate season for identification of habitat and vegetative species. For the purposes of these surveys, rare vegetation types are defined as those vegetation alliances or associations listed as rare or worthy of special consideration by CDFG (California Department of Fish and Game 2003 or latest version[1]). Rare landscape features are physical or hydrologic features that are rare in the inventory area and provide important habitat for covered species and biological diversity.

Examples of rare grassland alliances that must be identified include, but are not limited to, the following:

[1] Vegetation classification by CDFG is an ongoing effort. The latest classification scheme should be used.

- purple needlegrass grassland,
- wildrye grassland,
- wildflower fields,
- squirreltail grassland,
- one-sided bluegrass grassland,
- serpentine grassland,
- saltgrass grassland (= alkali grassland), and
- alkali sacaton bunchgrass grassland.

Rare landscape features that occur in the inventory area and that must be identified include but are not limited to the following:

- rock outcrops,
- caves,
- springs and seeps,
- alkali wetlands,
- scalds, and
- sand deposits.

It is not possible to create a complete list of the rare vegetation alliances or rare landscape features that currently occur in the inventory area. In addition, current understanding of vegetation alliances in California and the determination of which alliances are rare can change over time. These lists are meant as guides to inform the selection of rare vegetation alliances or other landscape features that should be considered in an assessment of impact sites or potential preserves. The assessment should be based on the accepted professional standards at the time (e.g., California Department of Fish and Game 2003).

Project proponents will avoid impacts on these features whenever possible. If impacts cannot be avoided, they will be minimized through the use of project siting and design, buffer zones between development and the features, best management practices, and other suitable means. Impacts on these features will not be allowed until surveys document that the extent and quality of these features within acquired HCP/NCCP preserves is at least equal to that of the cumulative impact on the features that result from covered activities. Moreover, impacts will not be allowed until surveys on HCP/NCCP preserve lands document that the ecological functions of the rare vegetation alliances are at least as high as the rare vegetation alliances lost to covered activities. Impacts on these features must be tracked by the Implementing Entity to ensure that preservation of these features keeps pace with impacts.

**Rationale**

- Rare vegetation alliances and rare landscape features within the inventory area provide important habitat for many covered species and generally support unique suites of species. Because of their uniqueness, they may contribute disproportionately to the overall biological diversity of the area. By minimizing impacts on these alliances and features, the HCP/NCCP will contribute substantially to the preservation of native biological diversity in the region.
- Because of limitations in funding and site access, the small size of most of these features, and the inherent difficulty of observing these features from aerial photos or in the field, it was not possible to map all these features in the inventory area. Therefore, the impacts on these features that would result from covered activities cannot be evaluated prior to implementation with any certainty.
- To ensure that impacts on these features are minimized and a majority of these features are preserved in the inventory area, planning surveys during HCP/NCCP implementation will be necessary to determine their location, condition, and extent in the inventory area..

## Delineation of Jurisdictional Waters

If wetlands are present on the site, project proponents must conduct a delineation of waters of the United States and waters of the State according to the accepted standards of USACE and CDFG. All jurisdictional delineations will be accompanied by a report containing information about the wetlands and other waters to the current standards of both agencies. The report will also document the avoidance and minimization measures integrated into the project and the expected impact on the wetlands and waters that would result from the project. The report will be submitted to the Implementing Entity prior to approval of the project under the HCP/NCCP. The project will not receive permit coverage until it has properly mitigated the impact on jurisdictional waters according to the terms of the Regional General Permit, the Programmatic Section 1602 agreement (Master Streambed Alteration Agreement), and this HCP/NCCP (see Conservation Measures 2.2.1, 2.2.2, and 2.2.3).

**Rationale**. Jurisdictional delineations are necessary to identify regulated resources and support compliance with Section 404 of the CWA and Section 1602 of the California Fish and Game Code. The Regional General Permit and Master Streambed Alteration Agreement developed in parallel with the HCP/NCCP will require the delineation of waters subject to both federal and state jurisdiction.

A delineation of jurisdictional waters of the inventory area was not funded during HCP/NCCP development. In addition, USACE-verified, jurisdictional delineations expire after 2 years, although they can be extended to 5 years. A delineation of the permit area during HCP/NCCP

development would expire prior to implementation of most or all covered activities.

Chapter 3 quantifies the extent of wetlands and other waters that may be jurisdictional in the inventory area, but this estimate is a substantial underestimate of the true extent of jurisdictional waters of the United States. The minimum mapping unit of 1 acre omits many wetlands, and the small streams and drainages were not discernable with the available imagery. Consequently, site-specific surveys will be necessary to document the true extent of wetlands and other waters affected by covered activities.

Jurisdictional delineations provide a repeatable, consistent method of tracking the impacts on wetlands and other waters within the inventory area and ensuring that these impacts are properly mitigated.

A jurisdictional delineation serves as documentation of the condition of wetlands and other waters removed as a result of covered activities. This documentation serves as a benchmark for the restoration of wetlands within preserves as compensation for such loss (see Conservation Measure 2.1.1).

## Preconstruction Surveys for Wildlife

The need for preconstruction surveys will be based on results of planning surveys conducted for covered wildlife. Should planning surveys identify suitable habitat for the covered wildlife species (see Table 6.X for definitions of suitable habitat), and should project proponents be unable to avoid impacts by modifying project design or project implementation, preconstruction surveys will be used to identify the site-specific measures required to avoid and minimize take of covered species.

Preconstruction surveys within the Preserve System will take place at construction sites prior to implementing habitat enhancement, restoration, or creation measures and preserve-related maintenance activities that could result in take of covered species.

Techniques and specific requirements for preconstruction surveys for covered wildlife are found for the following species:

- Townsend's big-eared bat
- San Joaquin kit fox
- Western burrowing owl
- Swainson's hawk
- California tiger salamander
- California red-legged frog

- Covered shrimp species

Specific survey requirements are described in the section *on Adaptive Management and Monitoring by Natural Community* (below).

Preconstruction surveys serve to further minimize construction-related take of certain covered species. Although planning surveys identify the presence of habitat prior to final project design, preconstruction surveys further minimize impacts for certain sensitive species (see above list) and, in some cases, trigger construction monitoring (see table 6.x).

## Construction Monitoring

If necessary, project proponents (and the Implementing Entity for covered activities on preserve lands) will undertake construction monitoring during project implementation to ensure that measures required to avoid and minimize impacts on covered species and natural communities are properly implemented. Resources identified in planning or preconstruction surveys will be the focus of construction-monitoring efforts. Construction monitoring will be conducted by qualified biologists. Before implementing a covered activity, the project proponent will develop and submit a construction monitoring plan to the Implementing Entity for approval. Elements of construction monitoring plans will include the following:

- results of planning and preconstruction surveys;
- description of avoidance and minimization conservation measures to be implemented, including a description of project-specific refinements to the measures or additional measures not included in the HCP/NCCP;
- description of monitoring activities, including monitoring frequency and duration, and specific activities to be monitored; and
- description of the onsite authority of the construction monitor to modify implementation of the activity.

Construction monitoring is necessary to ensure that avoidance and minimization measures are implemented in accordance with permit requirements.

# Survey Requirements for Covered Wildlife Species

## Townsend's Big-eared bat

Identify suitable habitat (caves, mines, other structures) for Townsend big-eared bat on the Preserve System and determine presence/absence. Prior to initiating covered activities, survey for Townsend's big-eared bat as follows:

**Planning Surveys.**
USFWS/CDFG-approved biologist will identify potential Townsend big-eared bat habitat (rock formations with caves). If potential habitat is identified project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the occupied habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

**Preconstruction Surveys**.
If the project cannot avoid impacts to the suitable habitat of Townsend's big-eared bat, a preconstruction survey is required to determine whether the sites are occupied or whether they show signs of previous occupation. Preconstruction surveys are used to determine what avoidance and minimization requirements are triggered and whether construction monitoring is necessary.

**Avoidance and Minimization.**
If the species is discovered or if evidence of prior occupation is established, construction will be scheduled such that it minimizes impacts to Townsend's big-eared bat. . Hibernation sites with evidence of prior occupation will be sealed before the hibernation season (November–March), and nursery sites will be sealed before the nursery season (April–August). If the site is occupied, then the action should occur either prior to or after the hibernation season for hibernacula and after August 15 for nursery colonies. Construction should not take place as long as the site is occupied.

The locations of all suitable or occupied microhabitat within the inventory area are not known due to survey and mapping limitations. Hibernacula or nursery sites may be located during planning or preconstruction surveys. Avoiding impacts to occupied sites during sensitive periods will minimize disturbance or direct mortality as a result of covered activities, and sealing sites prior to construction will allow bats to reestablish elsewhere.

## San Joaquin Kit Fox

To avoid or minimize direct impacts on San Joaquin Kit Fox as a result of covered activities, the San Joaquin Kit Fox Preconstruction Survey and Impact Minimization Program described below will be implemented. This program was based on the USFWS *Standardized Recommendations for Protection of the San Joaquin Kit Fox prior to or during Ground Disturbance* (U.S. Fish and Wildlife Service 1999).

### Planning Surveys

A USFWS/CDFG-approved biologist will identify potential kit-fox habitat (grassland)(Conservation Measure 1.2.1). If potential habitat is identified project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Surveys

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having San Joaquin kit fox habitat (grassland). The surveys will establish the presence or absence of San Joaquin kit foxes and/or habitat features ( dens greater than 5 inches in diameter) and evaluate use by kit foxes in accordance with USFWS survey guidelines (U.S. Fish and Wildlife Service 1999). Preconstruction surveys will be conducted within 30 days of ground disturbance. The biologist will survey within the proposed disturbance footprint and a 250-foot radius from the perimeter of the proposed footprint to identify San Joaquin kit foxes and/or habitat features. The status of all dens will be determined and mapped. Written results of preconstruction surveys will be submitted to USFWS within 5 working days after survey completion and before the start of ground disturbance.

If San Joaquin kit foxes and/or habitat features are identified in the survey area, the measures described below will be implemented.

### Avoidance and Minimization Requirements

- If an occupied or previously active San Joaquin kit fox den is discovered in the proposed development footprint, the den will be monitored for 3 days by a USFWS/CDFG–approved biologist using a tracking medium or an infrared beam camera to determine if the den is currently being used. Procedures for occupied dens are summarized below.
- Unoccupied dens should be destroyed immediately to prevent subsequent use.

- If kit fox activity is observed at the den during the initial monitoring period, the den will be monitored for an additional 5 consecutive days from the time of the observation to allow any resident animal to move to another den Procedures for discouraging den use are summarized below.
- If a natal or pupping den is found, USFWS and CDFG will be notified immediately. The den will not be destroyed until the pups and adults have vacated and then only after further consultation with USFWS and CDFG.
- For dens other than natal or pupping dens, use of the den can be discouraged by partially plugging the entrance with soil such that any resident animal can easily escape. Once the den is determined to be unoccupied it may be excavated under the direction of the biologist. Alternately, if the animal is still present after 5 or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant (i.e., during the animal's normal foraging activities).
- If dens are identified in the survey area outside of the proposed disturbance footprint, exclusion zones around each den entrance or cluster of entrances will be demarcated. No covered activities will occur within the exclusion zones. Exclusion zones will be established and monitored during construction surveys.

**Construction Monitoring.**
The configuration of exclusion zones should be circular, with a radius measured outward from the den entrance(s). Exclusion zones for potential and atypical dens will be at least 50 feet and will be demarcated with four to five flagged stakes. Exclusion zones for known dens will be at least 100 feet and will be demarcated with staking and flagging that encircles each den or cluster of dens but does not prevent access to the den by kit fox. If a natal/pupping den is found, USFWS will be notified immediately.

## Golden Eagle

**Planning Survey**.
A USFWS/CDFG-approved biologist will identify potential habitat for no-take species, including nests of golden eagle. If potential habitat is identified project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

**Preconstruction Survey.**
Prior to any ground disturbance related to covered activities, a qualified biologist will conduct a preconstruction survey to establish whether nests

of Golden Eagles are occupied (see Conservation Measure 1.2.3). If nests are occupied, minimization requirements and construction monitoring are required.

### Avoidance and Minimization

Covered activities will be prohibited within 0.5 miles of active nests during the nesting season.

### Construction Monitoring.

A 0.5-mile buffer will be established around active nest sites; If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be implemented, or that a larger buffer should be implemented, the Implementing Entity will coordinate with CDFG/USFWS to determine the appropriate buffer size.

Although no known golden eagle nest sites occur within or near the ULL, covered activities inside and out of the Preserve System have the potential to disturb golden eagle nest sites. To ensure that these nest sites are not abandoned or otherwise disturbed, covered activities will be limited in space and time to minimize impacts on golden eagles.

## Western Burrowing Owl

### Planning Survey.

A USFWS/CDFG-approved biologist will identify potential burrowing owl habitat (grassland, oak savanna, ruderal, seasonal wetlands))(Conservation Measure 1.2.1). If potential habitat is identified project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Surveys

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential burrowing owl habitat (grassland, etc.). The surveys will establish the presence or absence of Western burrowing owl and/or habitat features (burrows, pellets, whitewash, prey remains) and evaluate use by owls in accordance with CDFG survey guidelines (California Department of Fish and Game 1995).

Preconstruction surveys will be conducted within the proposed disturbance footprint and a 250 foot radius of the disturbance footprint perimeter. Surveys will take place no more than 30 days prior to

construction. During the breeding season (February 1–August 31) surveys will document whether burrowing owls are nesting on or directly adjacent to disturbance areas. During the nonbreeding season (September 1–January 31), surveys will document whether burrowing owls are simply using the habitat directly adjacent to any disturbance area. Survey results will be valid only for the season during which the survey is conducted.

### Avoidance and Minimization

If burrowing owls are found during the breeding season (February 1–August 31), the project proponent will avoid all nest sites that could otherwise be disturbed by project construction during the breeding season or while the nest is occupied by adults or young. Avoidance will include establishment of a nondisturbance buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. If burrowing owls are found during the nonbreeding season (September 1–January 31), the project proponent should avoid the owls and the burrows they are using. Avoidance will include the establishment of a buffer zone (described below).

If occupied habitat for burrowing owls cannot be avoided, passive relocation will be implemented by installing one-way doors in burrow entrances. Each burrow will be monitored following CDFG's protocol (California Department of Fish and Game 1995) for a 48-hour period after the one-way doors are installed. The doors will be checked every 24 hours following installation to determine whether they are still intact. If the one-way door is still correctly installed after a continuous 48-hour period (i.e., no animals have dug up the door and rendered it useless), then the one-way door will be removed and the burrows will be excavated using hand tools and plastic tubing to maintain an escape route for any animals still inside the burrow. Artificial burrows on preserve lands will be created according to the conservation measures established for this species.

### Construction Monitoring

Buffer zones of at least 250 feet will be established around each nest site. Buffer zones of 160 feet will be established around each burrow being used. The buffers will be delineated by highly visible, temporary construction fencing.

This measure incorporates avoidance and minimization guidelines from the California Department of Fish and Game Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 1995).

## Swainson's Hawk

### Planning Survey

A USFWS/CDFG-approved biologist will inspect all large trees with binociulars to document the presence or absence of Swainson's hawk nest sites (Conservation Measure 1.2.1). If nest sites are identified, project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the occupied habitat (1/2 mile or greater). Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Survey

Prior to any ground disturbance related to covered activities, a qualified biologist will conduct a preconstruction survey to establish whether nests of Swainson's hawk are occupied. If nests are occupied, minimization requirements and construction monitoring are required (see below).

### Avoidance and Minimization

During the nesting season (March 15 – September 15), covered activities within ½ mile of occupied nests will be prohibited. Activities outside the ½ mile buffer can take place as described below.

If an active nest tree must be removed for the project to proceed, tree removal shall only occur between September 15 and February 1.

### Construction Monitoring

A 1/2 mile buffer will be established around active nest sites;. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be implemented, the Implementing Entity will coordinate with CDFG/USFWS to determine the appropriate buffer size.

This measure is required by CDFG of all projects within the range of Swainson's hawk to avoid disturbance to Swainson's hawk nests (California Department of Fish and Game 1994).

## California Tiger Salamander

### Planning Surveys

A USFWS/CDFG-approved biologist will identify potential breeding habitat for salamander (e.g., ponds and wetlands in grassland, oak savanna, oak woodland, vernal pools, reservoirs small lakes). If potential habitat is identified, project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the occupied habitat. Avoidance and

minimization measures will be incorporated into the project design and other portions of the application package prior to submission of a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Survey

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having California tiger salamander habitat (streams, ponds, etc.). The surveys will document habitat quality and features (e.g., appropriately sized pools). Photodocumentation will be made of any habitat identified, and an assessment of aquatic habitat including water depth, vegetation type, presence of other amphibians, fish or crayfish, and connection to other water sources will be required.

### Minimization and Avoidance

Written notification to the Agencies, including photos and habitat assessment (described above) is required prior to disturbance of any occupied habitat.

## California Red-legged Frog

### Planning Surveys

A USFWS/CDFG-approved biologist will identify potential red-legged frog breeding habitat (e.g., slow-moving streams, ponds, or marshes) (Conservation Measure 1.2.1). If potential habitat is identified, project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the occupied habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Survey

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having red-legged frog habitat (streams, ponds, etc.). The surveys will document habitat quality and features. Photodocumentation will be made of any habitat identified, and an assessment of aquatic habitat including water depth, vegetation type, presence of other amphibians, fish or crayfish, and connection to other water sources will be required.

### Minimization and Avoidance

Written notification to the Agencies, including photos and habitat assessment (described above) is required prior to disturbance of any occupied habitat.

## Covered Shrimp

### Planning Surveys

A USFWS/CDFG-approved biologist will identify potential habitat for covered shrimp species. Suitable habitat is defined as vernal pools, temporary wetlands, sandstone rock outcrops. If potential habitat is identified, project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include relocating impacts away from the occupied habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Survey

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential shrimp habitat (vernal pools, alkali wetlands, sandstone rock outcrops, sandstone depressions). The surveys will establish the presence or absence of covered shrimp and/or habitat features (e.g., vernal pools, wetlands) and evaluate use by vernal shrimp in accordance with USFWS survey guidelines (U.S. Fish and Wildlife Service 1996b). Modifications to current protocols may be implemented to streamline the review and permitting process if such modifications are approved by USFWS. For example, the standard protocol requires a 2-year survey to determine absence of listed shrimp species. Potential modifications could allow a 1-year survey to determine absence but require some mitigation even if covered shrimp are not found during the 1-year survey.

### Minimization and Avoidance Requirements

To the maximum extent practicable, impacts on habitat of covered shrimp as a result of covered activities will be avoided by implementing the following measures based on existing mitigation standards (U.S. Fish and Wildlife Service 1996a):

- In areas near construction activities, establish a buffer (described below) from the outer edge of all hydric vegetation associated with vernal pools and vernal swales. Alternatively, at the request of the project proponent, representatives of the Implementing Entity and USFWS may conduct site visits to inspect the unique characteristics of specific project sites and may approve reductions of the the buffer. Buffer reductions may be approved for all or portions of the site whenever reduced setbacks will maintain the hydrology of the vernal pool and achieve the same or greater habitat values as would be achieved by the original buffer.
- Activities inconsistent with the maintenance of vernal areas within the buffers, disturbance of the onsite watershed, will be prohibited. Inconsistent activities include altering existing topography; placing new structures within the buffers; dumping, burning, and/or burying garbage or any other wastes or fill materials; building new roads or

trails; removing or disturbing existing native vegetation; installing storm drains; and using pesticides or other toxic chemicals.

- Filling of vernal pools will be delayed until pools are dry and samples from the top layer of vernal pools soils are collected. Soil collection will be sufficient to include a representative sample of plant and animal life present in the pools by incorporating seeds, cysts, eggs, spores, and similar inocula.
- Collected soils will be dried and stored properly with the date and location of collection clearly recorded on each sample. Soils will be deposited with the preserve manager. The preserve manager will retain the soils in a cool, dry area and will be responsible for providing soils to vernal pool construction managers for inoculating newly created vernal pools on preserve lands.

### Construction Monitoring

Establish a 250-foot buffer from the outer edge of all hydric vegetation associated with vernal pools and vernal swales. Buffers will be marked by brightly colored fencing or flagging throughout the construction process. Construction personnel will participate in a USFWS-approved worker environmental awareness program. A qualified biologist approved by USFWS will inform all construction personnel about the life history of listed vernal pool invertebrates, the importance of avoiding their habitat, and the terms and conditions of the HCP/NCCP Implementing Agreement.

## Giant Garter Snake

### Planning Survey.

A USFWS/CDFG-approved biologist will identify potential giant garter snake habitat (aquatic habitat accessible from the San Joaquin River) (Conservation Measure 1.2.1). If potential habitat is identified project proponents will avoid and minimize impacts to the maximum extent practicable. Avoidance measures should include re-locating impacts away from the habitat. Avoidance and minimization measures will be incorporated into the project design and other portions of the application package prior to submission for a permit. If project is unable to fully avoid impacts to suitable habitat, preconstruction surveys are required.

### Preconstruction Surveys

Prior to any ground disturbance related to covered activities, a USFWS/CDFG-approved biologist will conduct a preconstruction survey in areas identified in the planning surveys as having potential garter snake habitat (aquatic habitat including slough, ditch or channel) and 200 feet of adjacent uplands, measured from the outer edge of each bank. The surveys will delineate habitat and attempt to establish the presence or absence of giant garter snake.

### Avoidance and Minimization Requirements

To the maximum extent practicable, impacts on giant garter snake habitat as a result of covered activities will be avoided. If impacts on giant garter snake habitat as a result of covered activities cannot be avoided, the following measures will be implemented. These measures are based on the USFWS's *Standard Avoidance and Minimization Measures during Construction Activities in Giant Garter Snake Habitat* (U.S. Fish and Wildlife Service 1999).

- Limit construction activity that disturbs habitat to the period between May 1 and September 30. This is the active period for giant garter snake and direct mortality is minimized because snakes are more likely to independently move away from disturbed area. If activities are necessary in giant garter snake habitat between October 1 and April 30, the USFWS Sacramento Office will be contacted to determine if additional measures are necessary to minimize and avoid take.
- In areas where construction is to take place, dewater all irrigation ditches, canals or other aquatic habitat dewater between April 15 and September 30 to allow passive relocation by garter snake. Dewatered areas must remain dry, with no puddled water remaining, for at least 15 consecutive days prior to the excavation or filling of that habitat. If a site cannot be completely dewatered, netting and salvage of prey items may be necessary.
- In areas near construction activities, delineate a buffer of 200 feet within which vegetation disturbance or use of heavy equipment is prohibited.
- Confine clearing to the minimal area necessary to facilitate construction activities.

### Construction Monitoring

A USFWS-approved biologist will conduct a construction survey no more than 24 hours before construction in suitable habitat and will be on site during construction activities in potential aquatic and upland habitat. The biologist will provide USFWS with a field report form documenting the monitoring efforts within 24 hours of commencement of construction activities. The monitor will be available thereafter. If a snake is encountered during construction activities, the monitor will have the authority to stop construction activities until appropriate corrective measures have been completed or it is determined that the snake will not be harmed. Giant garter snakes encountered during construction activities should be allowed to move away from the construction area on their own. Only personnel with a USFWS recovery permit pursuant to Section 10(a)(1)(A) of the Endangered Species Act will have the authority to capture and/or relocate giant garter snakes that are encountered in the construction area. The project area will be re-inspected whenever a lapse in construction activity of 2 weeks or more has occurred.

To ensure that construction equipment and personnel do not affect nearby aquatic habitat for giant garter snake outside of construction areas, orange barrier fencing will be erected to clearly define the aquatic habitat to be avoided; restrict working areas, spoils, and equipment storage and other project activities to areas outside of aquatic or wetland habitat; and maintain water quality and limit construction runoff into wetland areas through the use of hay bales, filter fences, vegetation buffer strips, or other appropriate methods.

Fill or construction debris may be used by giant garter snake as an over-wintering site. Therefore, upon completion of construction activities, any temporary fill or construction debris must be removed from the site.

Construction personnel will participate in a USFWS-approved worker environmental awareness program. A qualified biologist approved by USFWS will inform all construction personnel about the life history of giant garter snakes; the importance of irrigation canals, marshes/wetlands, and seasonally flooded areas such as rice fields to giant garter snakes; and the terms and conditions of the Implementing Agreement.